

NATIONAL BIOLOGICAL SERVICE/NATIONAL PARK SERVICE
VEGETATION INVENTORY MAPPING PROGRAM
SCOTTS BLUFF NATIONAL MONUMENT, NEBRASKA
FINAL ALLIANCE/COMMUNITY ASSOCIATION PHOTO SIGNATURE KEY
 Natural Color Aerial Photography Flown July 1995 1:12,000 Scale
 December 10, 1996

ALLIANCE/ COMMUNITY ASSOCIATION CODE	ALLIANCE/ COMMUNITY ASSOCIATION	PHOTO SIGNATURE (describes alliance life form)	HEIGHT (meters)	CONTEXT	NOTES
01	Juniperus Scopulorum Woodland Alliance Juniperus scopulorum / Oryzopsis micrantha Woodland	COLOR: Very dark green TEXTURE: Coarse CROWN SIZE: Moderate CROWN SHAPE: Round, irregular DENSITY: Very low to moderate	3 - 7	Primarily on north-facing slopes of bluffs; occasionally located on west-facing slopes.	Few occurrences at Scotts Bluff. On bluff sideslopes, tends to favor wider ravine bottoms.
02	Pinus Ponderosa Woodland Alliance Pinus ponderosa / Juniperus scopulorum Woodland	COLOR: Dark green TEXTURE: Coarse CROWN SIZE: Moderate CROWN SHAPE: Round, irregular DENSITY: Very low to moderate	3 - 10	Tops, upper slopes, and north sides of bluffs.	Top of Scotts Bluff, north facing exposure of South Bluff, western prairie just below South Bluff. Understory is variable.
03	Populus Deltoides Temporarily Flooded Woodland Alliance Populus deltoides - (Salix amygdaloides) / Salix exigua Floodplain Woodland	COLOR: Dull to dark medium green to bright green TEXTURE: Coarse to very coarse CROWN SIZE: Moderate to large CROWN SHAPE: Globular to round, or star- shaped DENSITY: Low-moderate to moderate	6 - 16	Lower river floodplain terrace.	Primarily occurs in the North Platte River floodplain; and directly above and below the Gering Canal, result of artificial seepage.
05	Cercocarpus Montanus Shrubland Alliance Cercocarpus montanus / Bouteloua curtipendula Shrubland	COLOR: Medium green TEXTURE: Slightly coarse CROWN SIZE: Small to moderate CROWN SHAPE: Globular DENSITY: Low-moderate to moderate	1 - 3	Lower slopes of bluffs.	Very few occurrences in the monument, only at South Bluff Coyote Pass.
06	Salix Exigua Temporarily Flooded Shrubland Alliance Salix exigua Shrubland	COLOR: Dull medium to medium green TEXTURE: Slightly coarse to moderate CROWN SIZE: Small to moderate CROWN SHAPE: Round DENSITY: Moderate to high	.5 - 3	Inner edge of lower river floodplain terrace bordering sand bar areas; also at mouth of side ravines entering the lower floodplain terrace.	At the monument, occurs only within the North Platte River floodplain. Variable heights due to recent flooding disturbances. Differences between photo and field due to temporal changes.

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07	Symphoricarpos Occidentalis Temporarily Flooded Shrubland Alliance Symphoricarpos occidentalis Shrubland	COLOR: Variable; dark, medium, and bright green, or blue-green TEXTURE: Slightly coarse to smooth CROWN SIZE: Small to moderate CROWN SHAPE: Globular to spreading DENSITY: Low-moderate to high	.5 - 3	Primarily on ravine sides and bottoms; blue-green signature in alkaline ravines; occasionally on lower sideslopes of bluff in drainages.	Sometimes Juniperus virginiana planted in the ravines. Rhus aromatica tends to occur on the ravine sideslopes, Symphoricarpos occidentalis tends to occur on the flatter bottoms; also occurs directly above and below the Gering Canal, result of artificial seepage.
09	Andropogon Gerardii - (Calamagrostis Canadensis, Panicum Virgatum) Herbaceous Alliance Andropogon gerardii - Calamagrostis canadensis - Helianthus grosseserratus Herbaceous Vegetation	COLOR: Variable; Medium green, dull medium green, dull olive green; occasional yellowish brown inclusions TEXTURE: Fine CROWN SIZE: Not applicable CROWN SHAPE: Not applicable DENSITY: Low to high	<2	Lower river floodplain terrace.	At the monument, occurs only in the North Platte River floodplain. Tends to contain a variety of forbs.
10	Andropogon Hallii Herbaceous Alliance Andropogon hallii - Calamovilfa longifolia Herbaceous Vegetation	COLOR: Highly variable; bright green, medium green, dark green, blue green; occasional yellowish brown, yellow olive green, or dark green inclusions TEXTURE: Fine CROWN SIZE: Not applicable CROWN SHAPE: Not applicable DENSITY: Moderate to high	<1	Colluvial silt outwash areas; slight depressional areas on prairie at head of ravine; ravine sideslopes; sandy soil; grazed areas are shorter in height and lower in density.	Occurs throughout the prairie. Several occurrences contain scattered Artemisia filifolia.

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11	<p>Alliance Undefined</p> <p><i>Kochia scoparia</i> / <i>Bromus</i> spp. Early Seral Community</p>	<p>COLOR: Highly variable; bright to dull yellowish brown; brown; rusty brown; dark greenish black; mottled bright, light, and medium green; medium green; blue green; gray green; gray tan TEXTURE: Fine CROWN SIZE: Not applicable CROWN SHAPE: Not applicable DENSITY: High</p>	<2	<p>Brownish variations primarily on the prairie, but can occur on ravine sideslopes and bottoms; dark green to black on wide ravine bottoms, but can occur on prairie; greenish variations on wide ravine bottoms but can occur on prairie and lower river floodplain terrace; grazed areas are shorter in height and lower in density.</p>	<p>Ubiquitous throughout the monument. Highly disturbed areas. Also occur as small inclusions within other alliances/community associations. High variation in forb and exotic grass content.</p>
12	<p>Alliance Undefined</p> <p>Mixed Grass Prairie (Reseeded/Restored)</p>	<p>COLOR: Variable; bright medium green; medium green; olive green; dark green; blue green; gray green; dull medium, gray, and blue green; inclusions of yellowish brown TEXTURE: Fine CROWN SIZE: Not applicable CROWN SHAPE: Not applicable DENSITY: Moderate to high</p>	<1	<p>Unnatural looking; areas with squared corners and straight edges; each reseeded/restored area is uniform; variation from one reseeded/restored to another.</p>	<p>Several areas within the monument, all appear to have been reseeded with a monoculture. Early Seral Community tends to occur with reseeded areas.</p>
13	<p><i>Pascopyrum Smithii</i> Herbaceous Alliance</p> <p><i>Pascopyrum smithii</i> Herbaceous Vegetation</p>	<p>COLOR: Variable; medium green to dull medium green; blue green; bright green; brown to dark brown; dark green to black; inclusions of yellowish brown TEXTURE: Fine CROWN SIZE: Not applicable CROWN SHAPE: Not applicable DENSITY: High</p>	<1	<p>Flat wide ravine bottoms, and large lowland prairie areas.</p>	<p>Primarily within the central prairie around the Visitor Center. Occasionally in some wide-bottom ravine drainages. Small inclusions within the ravine shrubland. Also in herbaceous artificial seepage areas below the Gering Canal.</p>

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14	Stipa Comata - Bouteloua Gracilis Herbaceous Alliance Stipa comata - Bouteloua gracilis / Carex filifolia Herbaceous Vegetation	COLOR: Highly variable; bright to dull yellowish olive green; bluish green; bright to medium green; dull medium green; bluish gray; gray green; dark green to black; inclusions of yellowish brown TEXTURE: Fine CROWN SIZE: Not applicable CROWN SHAPE: Not applicable DENSITY: Low to high	<1	Yellowish olive green and dark green to black tend to occur on gently rolling prairie; medium green occurs on prairie as well as bluff tops and bluff upper to lower slopes; vegetation on bluff slopes tend to occur in lower density with rock outcrops; bluish green to gray green tend to occur on steeper slopes; grazed areas are shorter in height and lower in density.	Comprises most of the prairie. Less disturbed areas tend to have more Carex filifolia. Grazed areas tend to have more Stipa comata. Degraded areas tend to have a dark green to black signature of Pascopyrum smithii with Bromus spp. The bluff sideslopes tend to have more Bouteloua gracilis and Stipa comata. Scattered occurrences of Krascheninnikovia lanata and Yucca glauca, mainly on the prairie. This community tends to complex with Siltstone - Clay Butte Sparse Vegetation on the bluff sideslopes and tops.
15	Typha (Angustifolia, Latifolia) - (Scirpus Spp.) Semipermanently Flooded Herbaceous Alliance Typha spp. Inland Great Plains Herbaceous Vegetation	COLOR: Dark, medium, and gray green TEXTURE: Slightly moderate to fine CROWN SIZE: Not applicable CROWN SHAPE: Not applicable DENSITY: Moderate to high	<2	Inner edge of river floodplain, abandoned channels; wet.	Photos depict saturated, muddy, relatively unvegetated or low density vegetated area within the abandoned channels.
16	Carex Spp. - Typha spp. Saturated Herbaceous Alliance Typha spp. - Equisetum hyemale / Carex spp. Seep Herbaceous Vegetation	COLOR: Medium green TEXTURE: Slightly coarse CROWN SIZE: Not applicable CROWN SHAPE: Not applicable DENSITY: High	<2	Natural seep area, wet.	Primary occurrence at Scotts Spring; and herbaceous artificial seepage areas directly below the Gering Canal.
18	Open Bluff / Cliff Sparse Vegetation Inland Siltstone Bluff - Cliff	COLOR: White TEXTURE: Fine CROWN SIZE: Not applicable CROWN SHAPE: Not applicable DENSITY: Not applicable	N/A	Bluff wide vertical cliff faces; relatively unvegetated.	Because of vertical nature of cliffs, and parallax of photo, many occurrences complexed with adjacent alliance/community association.

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19	Rock Outcrop / Butte Sparse Vegetation Siltstone - Clay Butte Sparse Vegetation	COLOR: White TEXTURE: Fine CROWN SIZE: Not applicable CROWN SHAPE: Not applicable DENSITY: Not applicable	N/A	Rock outcrops at top, upper, middle, and lower slopes of bluffs; rock outcrops at ravine sideslopes; relatively unvegetated.	On bluff sideslopes, tend to occur as complex with <i>Stipa comata</i> - <i>Bouteloua gracilis</i> - <i>Carex filifolia</i> Herbaceous Vegetation. Many occurrences at the base of the bluff prominences.
20	Sand Flats Temporarily Flooded Sparse Vegetation Riverine Sand Flats - Bars Sparse Vegetation	COLOR: Bright white; green inclusions TEXTURE: Fine CROWN SIZE: Not applicable CROWN SHAPE: Not applicable DENSITY: Not applicable	N/A	Sand bars in the river floodplain, relatively unvegetated.	May contain rare density vegetation.
21	Large Eroding Cliffs Sparse Vegetation Eroding Great Plains Badlands Sparse Vegetation	COLOR: Bright white; green or gray green inclusions TEXTURE: Fine CROWN SIZE: Not applicable CROWN SHAPE: Not applicable DENSITY: Not applicable	N/A	Heavily dissected slopes, alkaline, relatively unvegetated.	Only occurs in the badlands area of the monument.
22	Small Eroding Cliffs / Banks Sparse Vegetation Eroding Great Plains Slopes Sparse Vegetation	COLOR: Medium green to blue green; dull blue green; yellowish brown inclusions TEXTURE: Fine CROWN SIZE: Not applicable CROWN SHAPE: Not applicable DENSITY: Low	<1	Low density vegetated sideslopes of ravines composed of eroding soil, not rock outcrop.	Occurs primarily in northwest prairie.